

ABSTRACT OF THE DISCLOSURE

An electric power generating system is provided that comprises a fuel cell stack having at least one solid polymer fuel cell, a cooling system having a coolant flow path that directs coolant to and from the stack, a fuel regulating system having a fuel flow path and for regulating the supply of fuel from a fuel supply to the stack via the fuel flow path, and a hydrogen concentration sensor. The sensor is located in the vicinity of the fuel regulating system and in the coolant flow path at a location downstream of the stack to detect hydrogen that may have been discharged by components of the power generating system in the coolant flow path upstream of the sensor, or by the fuel regulating system. In the event the measured hydrogen concentration exceeds a threshold level, steps are taken to reduce or stop the discharge of hydrogen from the power generating system.

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